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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,923	07/11/2003	Roy Phillip Demott	5530	4231
7590	01/13/2005		EXAMINER	
John E. Vick, Jr. Legal Department M-495 PO Box 1926 Spartanburg, SC 29304			JUSKA, CHERYL ANN	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 01/13/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

JL

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/617,923	DEMOTT ET AL.
Examiner	Art Unit	
Cheryl Juska	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-51 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/03.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Double Patenting***

1. Claims 24 and 25 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 20 and 15, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16, 23, and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 16 and 50 recite the limitation “said synthetic polymeric film.” There is insufficient antecedent basis for this limitation in the claim. The preceding claims merely recite “polymeric film.”

5. Claim 23 recites the limitation “said polyurethane film layer.” However, claim 23 depends from claim 1, while the polymeric film is not limited to polyurethane until claim 16.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,492,001 issued to Rubin et al. in view of US 5,672,222 issued to Eschenbach.

Rubin discloses a fabric treated with a fluorochemical composition and at least one polymeric film (abstract). Said fabric may be a woven, nonwoven, or knit fabric comprised of natural or synthetic fibers, such as cotton and polyester, respectively (col. 2, lines 60-67). The fluorochemical treatment is preferably a latex composition and may also include a fire retardant (col. 3, lines 54-60 and col. 3, lines 65-66). The polymeric film is preferably about 0.5 – 10 mils thick and may be made of aliphatic or aromatic urethanes (col. 6, lines 16-40). Said film may be adhered to the fabric by an intermediate adhesive layer comprised of a hot-melt polymer such as polyester or a liquid adhesive such as a plastisol (col. 6, line 41-col. 7, line 21).

Thus, the limitations of claims 1-3, 15, 16, 18-20, 24, 25, 27, 29, 30, 35-37, 49, and 50 are disclosed by Rubin with the exception that the nonwoven is a needlepunched nonwoven fabric. Rubin is silent with respect to suitable constructions for said nonwoven fabric. However, needlepunched nonwoven fabrics with or without pile loops are well known in the art. Applicant is hereby given Official Notice that needlepunched nonwovens having a flat surface (i.e., no pile) are a common form of nonwoven fabrics. Additionally, needlepunched nonwovens having pile are well known in the art. For example, Eschenbach discloses a needlepunched nonwoven fabric

comprises of staple fibers that are entangled by needling to form a surface having loops or cut pile thereon (abstract and col. 2, lines 5-55). As such, one skilled in the art would have been able to select a needlepunched nonwoven, with or without a pile side, as the nonwoven construction for the Rubin invention since said nonwovens are common in the art. Therefore, claims 1-3, 15, 16, 18-20, 24, 25, 27, 29, 30, 35-37, 49, and 50 are rejected as being obvious over the cited Rubin reference.

With respect to claims 4, 5, 38, and 39, Rubin does not explicitly teach the use of polypropylene fibers. However, Rubin teaches synthetic fibers in general are suited for the invention. Applicant is hereby given Official Notice that polypropylene fibers are common synthetic textile fibers. Thus, it would have been obvious to one skilled in the art to select polypropylene fibers as the synthetic fiber of the Rubin fabric since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Additionally, it would have been readily obvious to one skilled in the art to employ a blend of polyester and polypropylene fibers since it has been held obvious to combine two compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for very same purpose. The idea of combining them flows logically from their having been individually taught in prior art. Thus, the claims which are no more than mixing together of two conventional compositions are set forth as obvious subject matter. *In re Kerkhoven*, 205 USPQ 1069. Therefore, claims 4, 5, 38, and 39 are also rejected as obvious over the cited prior art.

With respect to claims 6 and 40, it is noted that Eschenbach teaches needlepunched nonwoven fabrics having basis weights ranging from 6 – 30 oz/yd<sup>2</sup> based upon the desired end use (col. 3, lines 22-23).

Regarding claims 7-9, 21, and 41-43, Eschenbach teaches the use of binder fibers, such as low melt polyethylene or low melt nylon, and latex backcoats to bind the nonwoven fabric (abstract, col. 2, lines 49-55, col. 3, lines 20-25 and 56-62). With respect to the latex backcoat, Eschenbach only exemplifies a styrene-butadiene (SBR) latex (col. 3, line 35). However, applicant is hereby given Official Notice that acrylic latexes are well known in the art. As such, it would have readily obvious to one skilled in the art to employ an acrylic latex for the SBR latex of Eschenbach since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, claims 7-9, 21, and 41-43 are also rejected.

With respect to claims 10-14, 22, and 44-48, the cited prior art does not explicitly teach a flame retardant in the binder or backcoat or teach flame retardant fibers. However, applicant is hereby given Official Notice that textiles commonly employed for garments and upholstery require flame retardant materials due to federal government standards. Hence, it is readily obvious to one skilled in the art to incorporate flame retardant materials into a fabric employed for these purposes. Specifically, applicant is given Official Notice that it is well known in the art to add flame retardant additives to latex compositions and/or to employ flame retardant fibers in textile fabrics. Such flame retardant fibers include those that are inherently flame resistant and those that have been treated with flame retardant compositions, such as phosphorus and bromide compounds. As such, it would have been readily obvious to add a flame retardant to the latex

backcoat (binder) in order to produce a flame retardant textile and/or to employ flame retardant fibers. Additionally, it would have been obvious to one skilled in the art to select an appropriate amount of flame retardant to meet the government standards. Therefore, claims 10-14, 22, and 44-48 are rejected.

With respect to claims 17, 23, 28, 32-34, and 51, the cited prior art does not explicitly teach that the polyurethane film comprises an aromatic polyether. However, said polyether urethanes are well known in the art. Applicant is hereby given Official Notice of this fact. Thus, it would have readily obvious to one skilled in the art to employ an aromatic polyether polyurethane film for the polyurethane film of Rubin since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, claims 17, 32-34, and 51 are also rejected. Additionally, it would have been obvious to one skilled in the art to halogenate said aromatic polyether polyurethane in order to provide fire resistance according to government standards. Therefore, claims 23 and 28 are also rejected.

Regarding claims 26 and 31, the prior art does not explicitly teach the polyester adhesive has the claimed melting point. However, it is argued that said melting temperature is met by the disclosure of said polyester adhesive since like materials cannot have mutually exclusive properties. Additionally, it would have been obvious to one skilled in the art to select an adhesive having a melt temperature that is sufficient to bond the layers while being low enough not to cause degradation of the materials being bonded upon heat-activation of said adhesive. Therefore, claims 26 and 31 are also rejected.

8. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2004/01012113 issued to DeMott et al. in view of the cited Eschenbach reference.

DeMott discloses a textile composite comprising any known woven, nonwoven, or knit fabrics (section [0020]) made of synthetic fibers such as polyester or polypropylene (section [0021]). Said fabric may be a pile fabric and/or said fibers may have a hairy surface in order to enhance bond strength of the fabric to other layers (section [0021]). Said fabric is treated with a stain resistant fluorochemical composition (section [0023]). Additionally, said fabric may be backcoated with a latex, such as an acrylic latex, for stabilization thereof (section [0024]). Said latex may include a flame retardant, such as a phosphorus or halogen compound to impart flame resistance to the textile (section [0024]). Said flame retardant is applied in amount of 0.25-7.5 oz/yd<sup>2</sup> (section [0024]). An adhesive layer, such as a polyester adhesive, is then applied to the backcoated fabric (section [0025]) to bond a polymeric film barrier layer thereto (section [0026]). Said barrier film may be a polyether polyurethane film having a thickness of 1-2 mils (section [0026]). Said barrier film may also include a flame retardant material such as cyclic phosphonate, halogenated paraffin, or brominated cyclic compounds (section [0029]).

Thus, DeMott teaches the presently claimed invention with the exception that the nonwoven fabric is a needlepunched nonwoven fabric with or without a pile surface. However, as discussed above said fabrics are well known in the art as evidenced by the cited Eschenbach reference. Hence, it would have been readily obvious to one skilled in the art to employ a needlepunched nonwoven fabric with or without pile for the generic nonwoven disclosed by DeMott with the expectation of producing a textile within the scope of the DeMott invention. Additional motivation is provided by DeMott's teaching of pile fabrics and the fact that

nonwoven fabrics are typically less expensive to make than woven or knit fabrics. Therefore, claims 1-4, 6-11, 15-18, 20-25, 27-30, 32-38, 40-45, and 49-51 are rejected as being obvious over the cited prior art.

Regarding claim 5 and 39, it would have been readily obvious to one skilled in the art to employ a blend of polyester and polypropylene fibers since it has been held obvious to combine two compositions each of which is taught by prior art to be useful for the same purpose in order to form a third composition that is to be used for very same purpose. The idea of combining them flows logically from their having been individually taught in prior art. Thus, the claims which are no more than mixing together of two conventional compositions are set forth as obvious subject matter. *In re Kerkhoven*, 205 USPQ 1069. Therefore, claims 5 and 39 are also rejected as obvious over the cited prior art.

Regarding claims 12-14 and 46-48, the cited prior art does not teach flame retardant fibers. However, applicant is hereby given Official Notice that textiles commonly employed for garments and upholstery require flame retardant materials due to federal government standards. Hence, it is readily obvious to one skilled in the art to incorporate flame retardant materials into a fabric employed for these purposes. Specifically, applicant is given Official Notice that it is well known in the art to employ flame retardant fibers in textile fabrics. Such flame retardant fibers include those that are inherently flame resistant and those that have been treated with flame retardant compositions, such as phosphorus and bromide compounds. As such, it would have been readily obvious to employ flame retardant fibers. Additionally, it would have been obvious to one skilled in the art to select an appropriate amount of flame retardant to meet the government standards. Therefore, claims 12-14 and 46-48 are also rejected.

The cited prior art does not explicitly teach the limitation of claim 19, wherein the adhesive layer is comprised of a heat activated web adapted for insertion between the nonwoven layer and the polymeric film. However, it is argued that this limitation is a method limitation in an article claim. As such, said limitation is not given patentable weight at this time. In order to be given patentable weight, a method limitation must materially effect the final product in a structural manner. It is believed that the starting form of the adhesive is immaterial to the final article produced. Hence, claim 19 is also rejected.

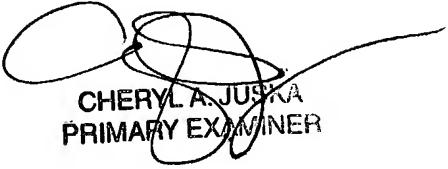
Regarding claims 26 and 31, the prior art does not explicitly teach the polyester adhesive has the claimed melting point. However, it is argued that said melting temperature is met by the disclosure of said polyester adhesive since like materials cannot have mutually exclusive properties. Additionally, it would have been obvious to one skilled in the art to select an adhesive having a melt temperature that is sufficient to bond the layers while being low enough not to cause degradation of the materials being bonded upon heat-activation of said adhesive. Therefore, claims 26 and 31 are also rejected.

### ***Conclusion***

9. The art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached

at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHERYL A. JUSKA  
PRIMARY EXAMINER